

BIOSOLIDS EMS MANUAL

ELEMENT 4.0

LEGAL AND OTHER REQUIREMENTS



REVISION	EFFECTIVE DATE	APPROVAL SIGNATURE
11	August 01, 2016	

PURPOSE

The purpose of this procedure is to summarize the process used by the City of Fort Worth Water Department and Village Creek Water Reclamation Facility (VCWRF) to track and comment on legislation and proposed rulemaking at the federal, state, and local level as well as permitting that would impose requirements on its biosolids land application operations. The procedure also describes the process used by VCWRF to track state-of-the-art biosolids management technology and best practice applications.

SCOPE

This procedure applies to all the organization's biosolids management activities at all critical control points throughout the biosolids value chain, including the pretreatment program, VCWRF liquid and solids operations, biosolids beneficial reuse and the future marketing and sale of biosolids for beneficial reuse. These locations in the Biosolids Value Chain have been cross referenced with the appropriate regulations in the attached table.

KEY WORDS

- Code of Federal Regulations (CFR)
- U.S. Environmental Protection Agency (EPA)
- Legal Requirements
- Operational Control Procedure
- Other Management Controls
- Other Requirements
- Texas Administrative Code (TAC)
- Texas Commission on Environmental Quality (TCEQ)

RESPONSIBILITY

Water Director - responsible for making department policy decisions and submitting official testimony on proposed legislation and rulemaking on behalf of VCWRF and for providing the resources necessary to implement new requirements.

Assistant Director (Water Reclamation and Reuse Division) - responsible for acquiring the necessary staff, capital and operating resources needed to implement new legal /regulatory requirements and technology upgrades.

Regulatory/Environmental (R/E) Administrator - responsible for tracking and coordinating comments on changes in federal, state, and local water, wastewater and biosolids legal and regulatory requirements.

Biosolids Environmental Management System (EMS) Manager - responsible for tracking and coordinating comments on changes in federal, state, and local biosolids legal and regulatory requirements.

Biosolids EMS Coordinator – responsible for updating the Environmental Management System manual with new legal and regulatory requirements.

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Assistant Water Systems Superintendent (Operations) - responsible for implementing changes to operational controls and monitoring procedures and for assuring that employees are fully trained to implement the new requirements.

See Roles and Responsibilities - EMS Element 7.0, for a full description of the roles and responsibilities of the personnel associated with the City of Fort Worth Biosolids Value Chain.

PROCEDURE

The Regulatory/Environmental Administrator, Biosolids EMS Manager, and Biosolids EMS Coordinator are responsible for tracking all federal, state, and local legal and regulatory requirements that are applicable to biosolids in general and beneficial reuse of biosolids processes and practices, such as land application.

Tracking mechanisms for legal and other requirements include the Federal Register, the National Biosolids Partnership Bulletins, Water Environment Federation (WEF), National Association of Clean Water Agencies, Water Environment Association of Texas, bulletins (i.e. WEF - Biosolids Technical Bulletin) and websites. VCWRF also receives direct communications from EPA, TCEQ, and other state agencies.

The R/E Administrator is the primary contact for corresponding with TCEQ and the EPA on issues that could result in Texas Pollutant Discharge Elimination System (TPDES) permit modifications. The R/E Administrator reviews any proposed changes and sends copies of the modifications to the affected department heads and the Water Director as needed. The R/E Administrator, department heads, and directors discuss the changes and make any necessary comments. The R/E Administrator then transmits these comments to the City Attorney's Office for review (if needed). Once the City Attorney's Office approves the comments the R/E Administrator returns the comments to the TCEQ or EPA. The Biosolids EMS Manager will function as the primary contact for routine correspondence between the City and TCEQ or EPA. Routine correspondence includes items such as land application schedules and notification of wet weather land application activities.

The City of Fort Worth participates proactively in Texas legislative and rulemaking activities through a lobby group and tracks similar developments in other states to stay abreast of current state and local biosolids activities.

The entire EMS Management Team tracks wastewater solids/biosolids stabilization and conditioning to stay abreast of state-of-the-art technology and biosolids best management practices. This information factors into the Capital Improvement Project prioritization and other improvements in biosolids management practices.

Information on new biosolids legal requirements, technology improvements, and resource productivity improvements are circulated to the EMS Management Team through emails, staff meeting discussions and presentations. This information is used to commission studies and reach decisions on capital investments based on new legal requirements, biosolids process and product quality improvements, market value and public acceptance criteria. Decision-making for resource commitments is part of annual budgeting and capital planning coordinated by the Assistant Water Director of the Water Reclamation and Reuse Division.

The Industrial Pretreatment manager also tracks categorical pretreatment requirements and coordinates with the Water and Assistant Water Directors to review pretreatment requirements and permits for new industrial/commercial businesses in Fort Worth and surrounding customer cities.

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Revisions and Updates

In order to ensure that the newest legal and other requirements are appropriately communicated and implemented, the Regulations Applicable to the VCWRF Biosolids Value Chain table (legal table) located at the end of this element will be reviewed and updated (if necessary) annually by August 1st. This information is reflected in the EMS planning schedule located at the back of the EMS manual. A review sheet documenting when the table has been reviewed will be housed at the back of the EMS Coordinator's copy of the EMS Manual with the EMS Planning Schedule. When the review is finished, Element 4.0 will be reissued if the table requires an update. If the table does not need to be updated after the review, the review sheet will still be completed.

Class AB Biosolids

On September 10th, 2014 the Texas Commission on Environmental Quality (TCEQ) amended the existing biosolids regulations as defined in 30 TAC Chapter 312. The revised regulations included a new designation for biosolids (Class AB) as well as requirements for odor control plans and the posting of signage at land application sites. The new provisions became effective on October 2, 2014 at which time the City of Fort Worth land application activities assumed the new "Class AB" classification.

REFERENCES

- BMP Guidance Manual: <http://www.wef.org/Biosolids/page.aspx?id=7733>
- Code of Federal Regulations: <http://www.ecfr.gov/cgi-bin/text-idx?tpl=%2Findex.tpl>
- Texas Administrative Code: <http://www.sos.state.tx.us/tac/>
- TPDES Permit WQ0010494013: City of Fort Worth

EMS Cross References:

- Element 3.0 Critical Control Points
- Element 7.0 Roles and Responsibilities
- Element 9.0 Communication
- Element 12.0 EMS Documentation, Document Control and Recordkeeping

ATTACHMENTS

- Regulations Applicable to the VCWRF Biosolids Value Chain table review sheet

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REVISION HISTORY

Revision #	Date	Revision Description
11	08/01/2016	Updated revision procedures, updated legal table
10	10/30/2015	Updated procedure, updated legal table, converted element to new format
09	10/06/2014	Included information regarding new classification (Class AB)
08	07/30/2014	Updated Element 4.0 table
07	08/05/2013	Updated references, included time frame for Element 4.0 table update/review, updated Element 4.0 table
06	07/29/2011	Update regulations and links in attached table
05	11/16/2010	Update responsibilities and references. Update links in attached table
04	05/15/2008	Audit (YR2) 2007
03	06/29/2007	Audit (YR1) 2006
02	11/29/2004	2004 Issue
01.a	10/18/2004	Internal Audit Revisions
01	10/01/2004	Draft Issue
SR	01/30/2004	Issued for Status Review

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Regulation	Description	Location	Governing Agency	Area(s) of Influence within the Biosolids Value Chain
<i>Federal Regulations</i>				
Code of Federal Regulations (CFR) Title 40 Chapter 1 Part 503	Standards for Use or Disposal of Sewage Sludge	http://www.ecfr.gov/cgi-bin/text-idx?SID=1d469f0d403e8c773f8e3122ae6bd75d&node=40:30.0.1.2.42&rgn=div5#40:30.0.1.2.42.2	EPA	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives - Agricultural Land Application
CFR Title 40 Chapter 1 Subchapter N Parts 403 - 471	General Pretreatment Regulations for Existing and New Sources of Pollution	http://www.gpo.gov/fdsys/search/page/details.action?collectionCode=CFR&searchPath=Title+40%2FChapter+1%2FSubchapter+N&granuleId=&packageId=CFR-2003-title40-vol1&oldPath=Title+40%2FChapter+1&fromPageDetails=true&collapse=true&yCORD=283	EPA	<ul style="list-style-type: none"> Pretreatment and Collection
CFR Title 40 Chapter 1 Parts 403.1-403.20	Pretreatment Streamlining Rule	http://www.gpo.gov/fdsys/pkg/FR-2005-10-14/pdf/05-20001.pdf	EPA	<ul style="list-style-type: none"> Pretreatment and Collection
CFR Title 40 Chapter 1 Parts 122.1-122.64	EPA Administered Permit Programs: The National Pollutant Discharge Elimination System	http://www.gpo.gov/fdsys/pkg/CFR-2002-title40-vol18/pdf/CFR-2002-title40-vol18-part122.pdf	EPA	<ul style="list-style-type: none"> Pretreatment and Collection Wastewater Treatment & Solids Generation Solids Stabilization, Conditioning, & Handling Biosolids Use and Disposal Alternatives - Agricultural Land Application
CFR Title 40 Chapter 1 Parts 261.1-261.38	Identification and Listing of Hazardous Waste	https://www.gpo.gov/fdsys/pkg/CFR-2012-title40-vol27/xml/CFR-2012-title40-vol27-part261.xml	EPA	<ul style="list-style-type: none"> Pretreatment and Collection Solids Generation, & Handling Biosolids Use and Disposal Alternatives
CFR Title 40 Chapter 1 Subchapter I-Solid Wastes: Parts 268.1-268.50	Land Disposal Restrictions	http://www.ecfr.gov/cgi-bin/text-idx?SID=810edf30621aa27815230de843bab663&mc=true&tpl=/ecfrbrowse/Title40/40cfr268_main_02.tpl	EPA	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives - Agricultural Land Application
33 U.S.C. 1342 (Clean Water Act- Section 402 of 1977 Amendments)	National Pollutant Discharge Elimination System	https://www.gpo.gov/fdsys/pkg/USC-ODE-2014-title33/pdf/USCODE-2014-title33-chap26-subchapIV-sec1342.pdf	EPA	<ul style="list-style-type: none"> Pretreatment and Collection Wastewater Treatment & Solids Generation Solids Stabilization, Conditioning, & Handling Biosolids Use and Disposal Alternatives - Agricultural Land Application

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Federal Motor Carrier Safety Regulations CFR Title 49 Parts 392.1-392.82	Driving of Motor Vehicles	http://www.fmcsa.dot.gov/regulations/title49/part/392	U.S. Department of Transportation	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives - Agricultural Land Application
CFR Title 40 Part 60 Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	http://www.ecfr.gov/cgi-bin/text-idx?node=sp40.7.60.d_0c	EPA	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
CFR Title 40 Part 60 Subpart GG	Standards of Performance for Stationary Gas Turbines	http://www.ecfr.gov/cgi-bin/text-idx?SID=9bdb200ff01f21b7d7b41c733c01470d&node=40:7.0.1.1.1.51&rgn=div6	EPA	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
<i>State Regulations</i>				
Texas Administrative Code (TAC) Title 30 Chapter 312 Subchapter A	General Provisions – Notifications, sampling & analysis, fees and permits	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=312&sch=A&rl=Y	TCEQ	<ul style="list-style-type: none"> Biosolids permitting and implementation
TAC Title 30 Chapter 312 Subchapter B	Land Application for beneficial use and storage at beneficial use sites	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=312&sch=B&rl=Y	TCEQ	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives – Agricultural Land Application
TAC Title 30 Chapter 312 Subchapter B, Rule 312.50	Storage and Staging of Sludge at Beneficial Use Sites	https://texreg.sos.state.tx.us/public/readtac\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=30&pt=1&ch=312&rl=50	TCEQ	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives – Agricultural Land Application
TAC Title 30 Chapter 312 Subchapter C	Surface Disposal	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=312&sch=C&rl=Y	TCEQ	<ul style="list-style-type: none"> Surface Disposal Requirements
TAC Title 30 Chapter 312 Subchapter D	Pathogen and Vector Attraction Reduction	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=312&sch=D&rl=Y	TCEQ	<ul style="list-style-type: none"> Biosolids Production, Stabilization, and Conditioning
TAC Title 30 Chapter 312 Subchapter G	Transporters and temporary storage provisions	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=312&sch=G&rl=Y	TCEQ	<ul style="list-style-type: none"> Biosolids Use and Transportation
TAC Title 30 Subchapter J	Wastewater Operators and Operations Companies	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=30&sch=J&rl=Y	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
TAC Title 30 Chapter 305 Subchapters A-F, O, P	Consolidated Permits	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=305	TCEQ	<ul style="list-style-type: none"> Pretreatment and Collection Wastewater Treatment & Solids Generation Solids Stabilization, Conditioning, & Handling Biosolids Use and Disposal Alternatives – Agricultural Land Application

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TAC Title 30 Chapter 307.1-307.10	Texas Surface Water Quality Standards	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=307&rl=Y	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
TAC Title 30 Chapter 315 Subchapter A	Pretreatment Regulations for Existing and New Sources of Pollution	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=5&ti=30&pt=1&ch=315&sch=A&rl=Y	TCEQ	<ul style="list-style-type: none"> Pretreatment and Collection
TAC Title 30 Chapter 319 Subchapters A-C	General Regulations Incorporated into Permits – Monitoring and Accidental Spill Requirements	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=319	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
Texas Health and Safety Code Chapter 361	Solid Waste Disposal Act	http://www.statutes.legis.state.tx.us/docs/HS/htm/HS.361.htm	TCEQ	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives - Agricultural Land Application
Texas Pollution Discharge Elimination System Program (TPDES) Permit WQ0010494013	Permit to dispose of wastes from the Village Creek Water Reclamation Facility	City of Fort Worth Water Department ; VCWRF	TCEQ	<ul style="list-style-type: none"> Pretreatment and Collection Wastewater Treatment & Solids Generation Solids Stabilization, Conditioning, & Handling Biosolids Use and Disposal Alternatives - Agricultural Land Application
Texas Transportation Code Title 7	Vehicles and Traffic	http://www.statutes.legis.state.tx.us/Docs/TN/pdf/TN.501.pdf	Texas Department of Public Safety	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives - Transportation & Agricultural Land Application
TAC Title 30 Chapter 101	General Air Quality Rules	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=101	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
TAC Title 30 Chapter 115	Control of Air Pollution from Volatile Organic Compounds	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=115	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
TAC Title 30 Chapter 116	Control of Air Pollution by Permits for New Construction or Modification	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=116	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
TAC Title 30 Chapter 117	Control of Air Pollution from Nitrogen Compounds	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=117	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
TAC Title 30 Chapter 106 Subchapters C,G,I, K, R, T, U, W, X	Permits by Rule	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=106	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation

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TAC Title 30 Chapter 111	Control of Air Pollution from Visible Emissions and Particulate Matter	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=111	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
TAC Title 30 Chapter 122	Federal Operating Permits Program	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=122	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
Texas Health and Safety Code (THSC) Chapter 382	Texas Clean Air Act	http://www.statutes.legis.state.tx.us/Docs/HS/pdf/HS.382.pdf	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
TAC Title 30 Chapter 210	Use of Reclaimed Water	https://texreg.sos.state.tx.us/public/readtac\$ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=210	TCEQ	<ul style="list-style-type: none"> Wastewater Treatment & Solids Generation
<i>Local Regulations</i>				
City of Fort Worth Code of Ordinances Part II, Chapter 12.5 Article VI, Ordinance 20043-01-2012	Environmental Protection and Compliance-Industrial Wastewater	http://publicdocuments.fortworthtx.gov/CSODOCS/DocView.aspx?id=17153&searchid=6fca3811-8882-406d-8246-cafb1091b3bc&dbid=0	City of Fort Worth Environmental Department, Water Department	<ul style="list-style-type: none"> Pretreatment & Collection
<i>Other Requirements and Special Documents</i>				
Special Contract Documents	Contracts between the City and Private Contractors to perform designated operations within the Biosolids Value Chain	City of Fort Worth Water Department; VCWRF	City of Fort Worth Water Department, Environmental Department	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives - Agricultural Land Application Solids Stabilization, Conditioning & Handling
Implementation Plan-Vector Attraction Reduction (VAR) Alternative #1	Proposal sent to TCEQ regard the implementation of VAR Alternative #1	City of Fort Worth Water Department; VCWRF	City of Fort Worth Water Department	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives-Agricultural Land Application Solids Stabilization, Conditioning & Handling
Vector Attraction Reduction Sampling SOP	SOP outlining steps necessary for successful collection of samples for meeting VAR requirements for Alternative #1	City of Fort Worth Water Department; VCWRF	City of Fort Worth Water Department	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives-Agricultural Land Application
TCEQ Approval Letter for VAR Alternative #1	Letter from TQEQ approving implementation of VAR Alternative #1	City of Fort Worth Water Department; VCWRF	City of Fort Worth Water Department	<ul style="list-style-type: none"> Biosolids Use and Disposal Alternatives-Agricultural Land Application